## Section II. (Amendments to the Claims)

Please amend claims 2 and 4-8, as set out below in the listing of claims 1-10 of the application.

- 1. (Original) A protein chip of a S-L-SP form wherein a substrate peptide (SP) is immobilized on a solid substrate (S) by the mediation of a linker protein (L).
- 2. (Currently amended) The protein chip according to claim 1, wherein the linker protein is comprises leptin or malic enzyme.
- 3. (Original) The protein chip according to claim 1, wherein the substrate peptide is fused with the linker protein in the form of a peptide monomer, a dimer of monomer-proline-monomer, or a multimer where monomers are linked to each other by a proline.
- 4. (Currently amended) The protein chip according to claim 3, wherein the peptide monomer is comprises kemptide (SEQ ID NO: 1) or Ab1 (SEQ ID NO: 8).
- 5. (Currently amended) The protein chip according to claim 1, wherein the solid substrate is comprises a side with exposed aldehyde.
- 6. (Currently amended) A method for analyzing the interaction between a reactive protein and its substrate peptide using the protein chip of claim 1, comprises comprising the steps of:
- (a) adding a reactive protein to the protein chip, the reactive protein showing a specific interaction with the substrate peptide immobilized on the protein chip; and
  - (b) detecting the interaction between the reactive protein and the substrate peptide.
- 7. (Currently amended). The method according to claim 6, wherein the reactive protein is comprises an enzyme or an antibody.
- 8. (Currently amended) The method according to claim 7, wherein the enzyme is comprises protein kinase A or Ab1 kinase.

- 9. (Original) The method according to claim 6, wherein the step of detecting the interaction between the substrate peptide and the reactive protein is carried out by using a fluorescence labeled antibody.
- 10. (Original) The method according to claim 8, wherein the step of detecting a phosphorylation of the substrate peptide by kinase is carried out by using a Cy3-labeled anti-phosphorylation serine antibody or a Cy5-labeled anti-phosphorylation tyrosine antibody.